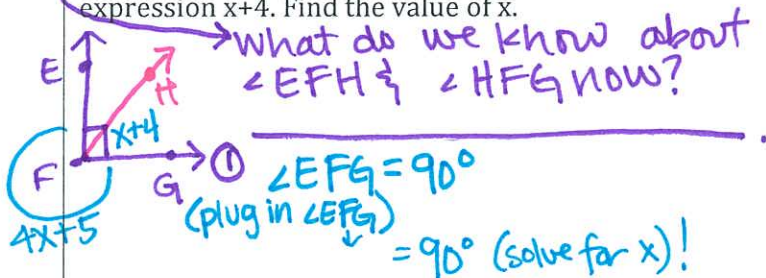


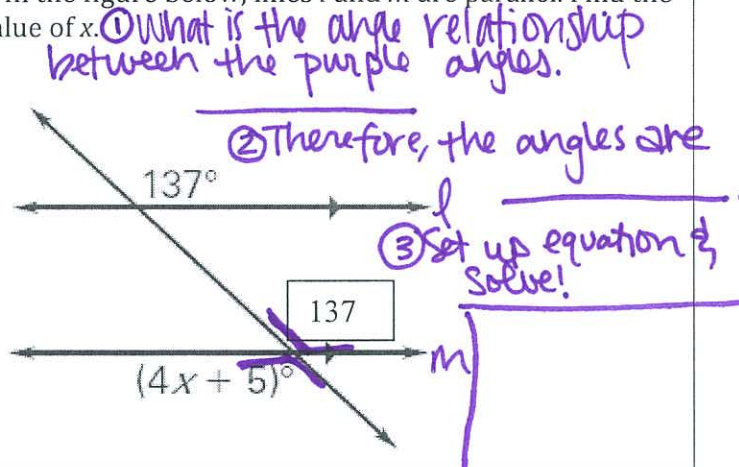
Name: _____ TP: _____

Failure to show work on all problems or use complete sentences will result in a LaSalle.

1. Angle EFG has a measure of 90 degrees. Ray FH bisects angle EFG. Angle EFG is represented by the expression $4x+5$ and angle HFG is represented by the expression $x+4$. Find the value of x .



2. In the figure below, lines l and m are parallel. Find the value of x .



3. Angle ABC and angle CBD are linear pairs. Angle ABC is represented by the expression $4x + 18$ and angle CBD is represented by the expression $20x + 30$. Find the measurement of angle ABC.

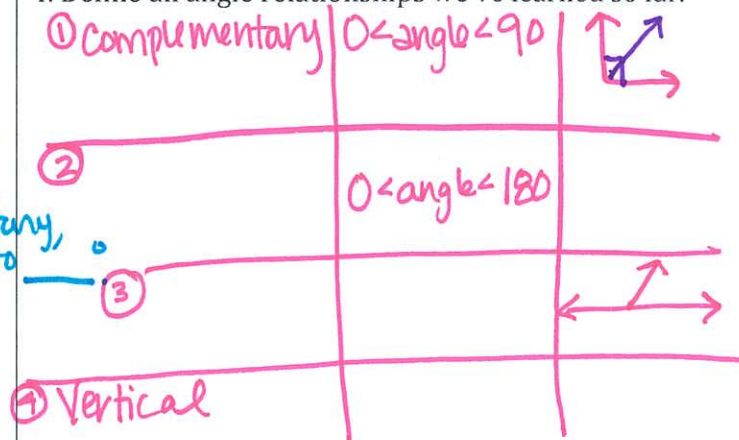
*Linear pairs: Adjacent, supplementary \angle s.

① Label your points!

② Fill in \angle measures.

③ Since they're supplementary, ADD them & set equal to

4. Define all angle relationships we've learned so far.



5. Angle CHA and angle AHS are complementary. If angle CHA is represented by the expression $5x+2$ and angle AHS is represented by the expression $7x-6$, what is the value of x ?

*Complementary means:

① DRAW $\angle CHA$ & $\angle AHS$.

6. \overline{BD} bisects $\angle ABC$. The measure of $\angle ABD$ is $3x - 4$ degrees, and $m\angle DBC$ is $7x - 20$. What is the measure of each angle? (DRAW a picture).

What does "bisects" mean?

① DRAW an angle with a ray bisecting it. Label angle measures. Solve for x .

GRASP REVIEW! (Mind the GAP with complete sentences!)

With the given endpoints (2,5) and (4,9) and the midpoint being on a perpendicular bisector, what is the equation of the line that goes through the original two points, and what is the equation of the perpendicular line that goes through the midpoint?

G Find the... ①
②

Goal

R

• Endpoint (2,5) (4,9)
 x_1 y_1 x_2 y_2

• Perpendicular bisector

Slope is opposite reciprocal

→ Splits line in ———.

• Equation → $y = mx + b$

• Midpoint $\frac{x_1 + x_2}{2} = x_m, \frac{y_1 + y_2}{2} = y_m$

Required

GOAL 1: How will you solve?
Use graph paper if you need to!

GOAL 2: How will you solve?

A

Analysis

S

Solve

GOAL 1:

① Find the slope! $\frac{y_2 - y_1}{x_2 - x_1}$

② Plug into $y = mx + b$ & solve for b

③ Re-write: $y = mx + b$

GOAL 2:

① Find the midpoint!

② Take the slope from goal 1 & find the opposite reciprocal.

③ Plug into $y = mx + b$ & solve for b .

④ Re-write: $y = mx + b$

P

Paraphrase
(How do you know you are correct?)

STAY READY